

Notice of Allowability

Application No.

09/885,394

Applicant(s)

LEVY ET AL.

Examiner

William C. Vaughn, Jr.

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2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/19/05 and 7/13/05.
2. ☒ The allowed claim(s) is/are 1-4, 7-10, 19-22, Renumbered 1-12.
3. ☒ The drawings filed on 16 September 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 7/13/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jan Little-Washington, Reg. No. 41,181 on 13 July 2005.

Title

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --MULTIPHASE ENCODED PROTOCOL AND SYNCRHONIZATION OF NETWORK BUSES--.

IN THE CLAIMS

Please cancel claims 6, 11, 13-16, 18, and 24 without prejudice or disclaimer.

Please amend claims 1, 7, and 19 as follows:

1. (Currently Amended) A network, comprising:

- at least one transmitting device and at least one receiving device; and
- a bus coupled to between the devices to exchange frames, wherein each frame is to include a data structure, at least one control structure, and a clock structure, and wherein a rising edge of each frame is to indicate the clock structure and a falling edge of each frame is to indicate that a structure that follows the falling edge of the frame is the data structure or the command

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structure, and wherein any receiving device in a set of devices is coupled to use a clock structure to adjust each phase of one or more of the frames to synchronize the frames with each other,

wherein the falling edge of the frame occurring at one predetermined point in the control structure is to indicate a first command word and the falling edge of the frame occurring at a second predetermined point in the control structure is to indicate a secondary set of command words, and wherein the falling edge of the frame occurring at one predetermined point in the data structure indicates a first data word and the falling edge of the frame occurring at a second predetermined point in the data structure indicates a secondary set of data words, and wherein the secondary set of command words is greater than the secondary set of data words.

7. (Currently Amended) A method for processing data in a network, comprising:

transmitting computer data signals embodied in carrier waves from a transmitting device to a receiving device, wherein each computer data signal is to include a data structure embodied in an encoded frame, at least one control structure embodied in the encoded frame, and a clock structure embodied in the encoded frame, and wherein a rising edge of the encoded frame is to indicate the clock structure and a falling edge of the frame is to indicate whether what follows the falling edge of the frame is the data structure or the command structure; and

receiving the computer data signals at the receiving device and using the clock to adjust the phase of the frames to synchronize the frames with each other,

wherein transmitting computer data embodied in carrier waves from a transmitting device to a receiving device comprises:

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dropping the falling edge of the frame at one predetermined point in the control structure to indicate a first command word and at a second predetermined point in the control structure to indicate a secondary set of command words; and

dropping the falling edge of the frame at one predetermined point in the data structure to indicate a first data word and at a second predetermined point in the data structure indicates a secondary set of data words, and wherein the secondary set of command words is greater than the secondary set of data words.

19. (Currently Amended) A network, comprising:

at least one transmitting device and at least one receiving device; and

a bus coupled to between the devices to exchange frames, wherein each frame is to include a data structure, at least one control structure, and a clock structure, and wherein a rising edge of each frame is to indicate the clock structure and a falling edge of each frame is to indicate that a structure that follows the falling edge of the frame is the data structure or the command structure, and wherein any receiving device in a set of devices is coupled to use a clock structure to adjust each phase of one or more of the frames to synchronize the frames with each other,

wherein the falling edge of the frame occurring at one predetermined point in the control structure is to indicate a first command word and the falling edge of the frame occurring at a second predetermined point in the control structure is to indicate a secondary set of command words, and wherein the falling edge of the frame occurring at one predetermined point in the data structure indicates a first data word and the falling edge of the frame occurring at a second

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predetermined point in the data structure indicates a secondary set of data words, and wherein the secondary set of command words is greater than the secondary set of data words.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: the closet prior art of record (Cook, U.S. Patent No. 5,436,897) does not teach nor suggest in detail wherein the falling edge of the frame occurring at one predetermined point in the control structure is to indicate a first command word and the falling edge of the frame occurring at a second predetermined point in the control structure is to indicate a secondary set of command words, and wherein the falling edge of the frame occurring at one predetermined point in the data structure indicates a first data word and the falling edge of the frame occurring at a second predetermined point in the data structure indicates a secondary set of data words, and wherein the secondary set of command words is greater than the secondary set of data words in combination with all the elements of each independent claim as argued by Applicant (see page 9 of applicant's argument dated 19 May 2005 as well as the enabling portions of Applicant's specification, pages 12-17). So as indicated by the above statements, Applicant's arguments have been considered persuasive, in light of the claim limitations as well as the enabling portions of the specification.

4. The dependent claims further limit the independent claims and are considered allowable on the same basis as the independent claims as well as for the further limitations set forth. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

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Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

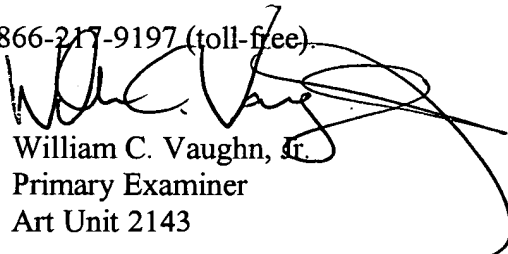
5. **Claims 1-4, 7-10 and 19-22** are allowed. Renumbered 1-12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Vaughn, Jr. whose telephone number is (571) 272-3922. The examiner can normally be reached on 8:00-6:00, 1st and 2nd Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William C. Vaughn, Jr.
Primary Examiner
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WCV